IN THE CLAIMS

1.   (Currently Amended) ~~Apparatus (1; 20; 34)~~ <u>An apparatus</u> for storing at least one sequence of information [[(2)]], said information being formed ~~of~~ <u>from</u> a succession of information items ~~(ti, tj)~~ in which an artistic or rational link is considered to exist between at least some pairs of adjacent items in said succession <u>of information items, said apparatus</u> comprising:

[[-]] input means [[(I1)]] for receiving said sequence of information<u>;</u> ~~(2), and~~

[[-]] storage means ~~(10;32)~~ for storing said information;

~~characterized in that it further comprises~~ segmentation means [[(6)]] for segmenting said sequence of information [[(2)]] into individually accessible segments<u>,</u> ~~(seg.1-seg.n)~~ each corresponding to a respective information item ~~(ti, tj)~~, in response to segmentation data [[(4)]] indicating end limits of said information items;

<u>wherein</u> said storage means ~~(10;32) being accessible to output~~ <u>outputs</u> said segments in a sequence corresponding to said succession of information items ~~(ti, tj)~~ <u>; and</u>

<u>producing means for automatically producing similarity relations between the segments in terms of mutual closeness in which the segments initially occurred in the received sequence of information.</u>

2.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 1, wherein ~~said~~ the received sequence of information is in ~~the form of~~ a data stream [[(2)]] form, said segmentation means [[(6)]] being responsive to time information in said segmentation data [[(4)]] indicating times of occurrence of said end limits of said information items ~~(ti, tj)~~ for ~~cutting up said stream~~ automatically dividing the stream in order to extract said segments ~~(seg.1-seg.n) therefrom~~.

3.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 1, wherein said segmentation means [[(6)]] is adapted to receive the segmentation data ~~(4) through~~ via a second input [[(I2)]] separate from said information [[(2)]] to be stored.

4.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 3, wherein said segmentations means [[(6)]] is adapted to extract said segmentation data [[(4)]] from a website associated [[to]] with a source of said sequence of information.

5.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 1, wherein said segmentation means [[(6)]] is adapted to extract said segmentation data [[(4)]] from said sequence of information.

6.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 1, wherein said input means [[(I1)]] is adapted to receive said sequence of information [[(2)]] in the form of audio data, and wherein said segmentation means [[(6)]] is ~~operative to form~~ capable of forming segments, ~~(seg.1-seg.n)~~ each corresponding to a music title in said sequence of information.

7. (Currently Amended) ~~Apparatus~~ <u>The apparatus</u> according to claim 6, wherein said input means [[(I1)]] is adapted to receive said audio data [[(2)]] from a radio station sending a sequence of music titles in accordance with a music ~~programme~~ <u>program</u>.

8. (Currently Amended) ~~Apparatus~~ <u>The apparatus</u> according to claim 6, wherein said input means [[(I1)]] is adapted to receive said audio data [[(2)]] from music compilations selected and entered by a user.

9. (Currently Amended) ~~Apparatus~~ <u>The apparatus</u> according to claim 8, wherein said music compilation is in the form of a command to download from a server selected music titles in an order corresponding to a selected succession.

10. (Currently Amended) ~~Apparatus~~ <u>The apparatus</u> according to claim 1, further comprising:

[[-]] identification means [[(26)]] connectable to a source of identification data identifying information items in said sequence of information [[(2)]], said identification means extracting at least some of said identification data to form an identifier ~~(id.1-id.n)~~, and

[[-]] combining means [[(28)]] for combining with a given segment ~~(seg.i)~~ an identifier ~~(id.i)~~ corresponding thereto,

said storage means [[(32)]] further being arranged to store said identifier ~~in association with~~ <u>corresponding to</u> said segment.

11.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 10, wherein said identifier ~~(id.1-id.n)~~ includes data indicative of an attribute under which respective groups of said segments ~~(seg.1-seg.n)~~ can be generically identified and ~~classed~~ classified.

12.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 11, wherein said attribute corresponds to at least one type of music under which a music title can be classified ~~classed (e.g. Rock, Jazz, Light Classical, ...)~~.

13.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 12, wherein said identifier ~~(id.1-id.n)~~ includes artist data indicative of an artist associated with the corresponding music title, and said apparatus further comprises deriving means ~~(74, 76)~~ for deriving at least one said type ~~on the basis~~ of music based on said artist data.

14.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 1, further comprising similarity analyzing means ~~(44, 44-1)~~ for ~~producing~~ automatically analyzing similarity relations between stored segments ~~(seg.1-seg.n)~~ in terms of their closeness in said sequence of stored segments.

15.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim [[14]] 1, wherein said ~~similarity analyzing~~ producing means ~~(44, 44-1, 46)~~ produces said similarity relations by producing, for each segment ~~(seg.i)~~ corresponding to an information item considered ~~(ti)~~ in a given stored sequence, a similarity relation ~~graph~~ representation expressing a distance D ~~(ti, tj)~~ between that information item and other stored information items.

16.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 15, wherein said similarity relation ~~graph~~ representation contains, for each said other information item ~~(tj)~~, a closeness value determined between pairs formed by said information item considered ~~(ti)~~ and said other information item ~~(tj)~~.

17.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim [[14]] 16, wherein said ~~analyzing~~ producing means ~~(44, 44-1)~~ is arranged to calculate said closeness value for said information item considered ~~(ti)~~ by attributing a first closeness value each time said other information item ~~(tj)~~ appears just before or just after in said sequence,

said first ~~values~~ closeness value being cumulated over said sequence to yield a cumulated value indicating ~~the~~ a closeness of said ~~pair~~ pairs of information items ~~(ti, tj)~~.

18.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 17, wherein said ~~analyzing~~ producing means ~~(44, 44-1)~~ is further arranged to attribute a second closeness value, smaller than said first closeness value, each time said other information item ~~(tj)~~ is separated from said information considered ~~(ti)~~ by m separating information items, where m is an upper bounded number,

said first and second closeness values being cumulated over said sequence to yield a cumulated value indicating the closeness of said ~~pair~~ pairs of information items ~~(ti, tj)~~.

19.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 18, wherein said number m of separating information items is equal to one.

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20.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 1, wherein said apparatus further comprises a music ~~programme~~ program generating means ~~(48, 50)~~ for building a sequence of information items from said stored segments ~~(seg.1-seg.n)~~.

21.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 20, wherein said ~~programme~~ program generating ~~apparatus (48, 50)~~ means is ~~operative to build~~ capable of building said sequence of information items in response to user ~~tastes~~ preferences expressed through user inputs ~~(54, 56, 58)~~.

22.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 20, wherein said ~~programme~~ program generating ~~apparatus (48, 50)~~ means is ~~operative to build~~ capable of building said sequence of information items in response to similarity relations between stored segments in terms of their closeness values in said sequence of stored segments, in which information items are concatenated by taking their closeness values into account.

23.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 21, wherein said ~~programme~~ program generating means ~~(48, 50)~~ is responsive to a user input [[(56)]] expressing a like or dislike, associated to at least some information items in said succession of information items, to create a sequence of information items in which said disliked information items ~~tend to be~~ are removed and liked information items are emphasized.

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24.   (Currently Amended) ~~Apparatus~~ The apparatus according to claims 22, wherein said ~~programme~~ program generating means ~~(48, 50)~~ is further responsive to said similarity relations to create a sequence of information items in which information items close to disliked information items are de-emphasized and/or in which information items close to liked information items are emphasized.

25.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 20, wherein said ~~programme~~ program generating means ~~(48, 50)~~ is responsive to a selected attribute ~~(e.g. type of music)~~ of said information items, ~~according to claim 11,~~ said selected attribute being entered through a corresponding user input [[(54)]], to create a sequence of information items containing at least a preponderance of information items falling under said selected attribute.

26.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 25, wherein said ~~programme~~ program generating means ~~(48, 50)~~ is arranged to create a sequence of information items by taking into account said selected attributes associated to said information items, and wherein said ~~programme~~ program generating means is further responsive to a discovery parameter entered through a user input [[(58)]] expressing a degree of accepted departure from said at least a preponderance of information items falling under said selected attribute, whereby said discovery parameter can be set to a first value in which said preponderance is maximal, possibly total, and to a second value, in which said sequence also contains a certain proportion [[P]] of information items not falling under said selected attribute.

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27.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 26, wherein said proportion [[P]] can take on a range of values ~~through~~ via said corresponding user input [[(58)]].

28.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 26, wherein said ~~programme~~ program generating means ~~(48, 50)~~ is further responsive to said similarity ~~relation~~ relations between the stored segments in terms of their closeness in said sequence of stored segments, such that [[a]] said information ~~item not falling~~ items do not fall under [[a]] said selected attribute ~~(e.g. type of music) is~~ and are entered in said created sequence ~~if and where it has~~ when said information items have a predetermined degree of closeness, as determined by said similarity relations, with an adjacent information item of said sequence.

29.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim 20, wherein said ~~programme~~ program generating means ~~(48, 50)~~ comprises means for ~~labelling~~ labeling and storing said created sequences as objects which can be selectively exported outside said apparatus.

30.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim [[1]] 29, further comprising importing means for importing said created sequences.

31.   (Currently Amended) ~~Apparatus~~ The apparatus according to claim [[1]] 29, wherein said apparatus is connected to a playback means for receiving said segments of a selected created sequence ~~and expressing the data contained therein in a form intelligible to a user (e.g. music, images, etc.)~~.

32.   (Currently Amended) ~~Use of the apparatus~~ The apparatus according to claim 1, wherein said apparatus produces ~~for producing~~ at least one ~~taste~~ preference, said ~~taste~~ preference being a user ~~taste~~ preference comprised of ~~a sequence~~ the succession of information items produced by taking into account feedback from said user, or a generic ~~taste~~ preference comprised of a sequence.

33.   (Currently Amended) ~~Method~~ A method of storing at least one sequence of information [[(2)]], said information being formed ~~of~~ from a succession of information items ~~(ti, tj)~~ in which an artistic or rational link is considered to exist between at least some pairs of adjacent items in said succession of information items, said method comprising the steps of:

[[-]] receiving [[(I1)]] said sequence of information; ~~(2), and~~

[[-]] storing said information ~~(10;32)~~;

~~characterised in that it further comprises the steps of~~ segmenting [[(6)]] said sequence of information [[(2)]] into individually accessible segments, ~~(seg.1-seg.n)~~ each corresponding to a respective information item ~~(ti, tj)~~, in response to segmentation data [[(4)]] indicating end limits of said information items;

said stored segments being ~~accessible for outputting said segments~~ output in a sequence

corresponding to said succession of information items ~~(ti, tj)~~ ; and

automatically producing similarity relations between the segments in terms of mutual

closeness in which the segments initially occurred in the received sequence of information.

34.   (Currently Amended) ~~Method~~ The method according to claim 33, wherein ~~said~~

the received sequence of information is in ~~the form of~~ a data stream [[(2)]] form, said

segmentation [[(6)]] being performed in response to time information in said segmentation data

[[(4)]] indicating times of occurrence of said end limits of said information items ~~(ti, tj)~~ for

~~cutting up said stream~~ automatically dividing the stream in order to extract said segments ~~(seg.1-~~

~~seg.n) therefrom~~.

35.   (Currently Amended) ~~Method~~ The method according to claim 33, wherein said

segmentation data [[(4)]] is extracted from a website associated [[to]] with a source of said

sequence of information [[(2)]].

36.   (Currently Amended) ~~Method~~ The method according to claim 33, wherein said

segmentation data [[(4)]] is extracted from said sequence of information.

37.   (Currently Amended) ~~Method~~ The method according to claim 33, wherein said

sequence of information [[(2)]] is received in the form of audio data, and wherein said

segmentation [[(6)]] serves to form segments, ~~(seg.1-seg.n)~~ each corresponding to a music title in

said sequence of information.

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38. (Currently Amended) ~~Method~~ The method according to claim 37, wherein said audio data [[(2)]] is received from a radio station sending a sequence of music titles in accordance with a music ~~programme~~ program.

39. (Currently Amended) ~~Method~~ The method according to claim 33, further comprising the steps of:

[[-]] identifying [[(26)]] from a source of identification data, ~~identifying~~ information items in said sequence of information [[(2)]], said ~~identification~~ identifying step extracting at least some of said identification data to form an identifier ~~(id.1-id.n)~~, and

[[-]] combining ~~(28) for~~ with a given segment ~~(seg.i)~~ an identifier ~~(id.i)~~ corresponding thereto,

said identifier being stored [[(32)]] in ~~association~~ accordance with said segment.

40. (Currently Amended) ~~Method~~ The method according to claim 39, wherein said identifier ~~(id.1-id.n)~~ includes data indicative of an attribute under which respective groups of said segments ~~(seg.1-seg.n)~~ can be generically identified and ~~classed~~ classified.

41. (Currently Amended) ~~Method~~ The method according to claim 40, wherein said attribute corresponds to at least one type of music under which a music title can be classified ~~classed (e.g. Rock, Jazz, Light Classical, ...)~~.

42. (Currently Amended) ~~Method~~ The method according to claim 41, wherein said identifier ~~(id.1-id.n)~~ includes artist data indicative of an artist associated with the corresponding music title, and said method further comprises a deriving ~~(74, 76)~~ step for deriving at least one said type ~~on the basis~~ of music based on said artist data.

43. (Currently Amended) ~~Method~~ The method according to claim 33, further comprising the ~~steps (44, 44-1) of producing~~ step of automatically analyzing similarity relations between stored segments ~~(seg.1-seg.n)~~ in terms of their closeness in said sequence of stored segments.

44. (Currently Amended) ~~Method~~ The method according to claim [[43]] 33, wherein said ~~similarity analyzing~~ producing step ~~(44, 44-1, 46)~~ produces said similarity relations by producing, for each segment ~~(seg.i)~~ corresponding to an information item considered [[(ti)]] in a given stored sequence, a similarity relation ~~graph~~ representation expressing a distance ~~D (ti, tj)~~ between that information item and other stored information items.

45. (Currently Amended) ~~Method~~ The method according to claim 44, wherein said similarity relation ~~graph~~ representation contains, for each said other information item [[(tj)]], a closeness value determined between pairs formed by said information item considered [[(ti)]] and said other information item [[(tj)]].

46.   (Currently Amended) ~~Apparatus~~ The method according to claim 44, wherein said ~~analyzing~~ producing step ~~(44, 44-1)~~ involves calculating said closeness value for said information item considered [[(ti)]] by attributing a first closeness value each time said other information item [[(tj)]] appears just before or just after in said sequence,

said first ~~values~~ closeness value being cumulated over said sequence to yield a cumulated value indicating ~~the~~ a closeness of said ~~pair~~ pairs of information items ~~(ti, tj)~~.

47.   (Currently Amended) ~~Apparatus~~ The method according to claim 46, wherein said ~~analyzing~~ producing step ~~(44, 44-1)~~ is further carried out to attribute a second closeness value, smaller than said first closeness value, each time said other information item [[(tj)]] is separated from said information considered [[(ti)]] by m separating information items, where m is an upper bounded number,

said first and second closeness values being cumulated over said sequence to yield a cumulated value indicating the closeness of said ~~pair~~ pairs of information items ~~(ti, tj)~~.

48.   (Currently Amended) ~~Method~~ The method according to claim 33, further comprising the step of generating ~~(48, 50)~~ a music ~~programme generating~~ program by building a sequence of information items from said stored segments ~~(seg.1-seg.n)~~.

49.   (Currently Amended) ~~Method~~ The method according to claim 48, wherein said ~~programme~~ program generating step ~~(48, 50)~~ involves building said sequence of information items in response to user ~~tastes~~ preferences expressed through user inputs ~~(4, 56, 58)~~.

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50.   (Currently Amended) ~~Method~~ The method according to claim 48, wherein said ~~programme~~ program generating step ~~(48, 50) is~~ involves building said sequence of information items in response to said similarity relations between stored segments in terms of their closeness values in said sequence of stored segments, in which information items are concatenated by taking their closeness values into account.

51.   (Currently Amended) ~~Method~~ The method according to claim 49, wherein said ~~programme~~ program generating step ~~(48, 50)~~ is carried out by taking into account a user input [[(56)]] expressing a like or dislike, associated to at least some information items in said succession of information items, to create a sequence of information items in which said disliked information items ~~tend to be~~ are removed and liked information items are emphasized.

52.   (Currently Amended) ~~Method~~ The method according to claim 50, wherein said ~~programme~~ program generating step ~~(48, 50)~~ is further carried out by taking into account said similarity relations to create a sequence of information items in which information items close to disliked information items are de-emphasized and/or in which information items close to liked information items are emphasized.

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53.   (Currently Amended) ~~Method~~ The method according to claim 49, wherein said ~~programme~~ program generating step ~~(48, 50)~~ is carried out ~~to take~~ by taking into account ~~of~~ a selected attribute ~~(e.g. type of music)~~ of said information items, said selected attribute being entered through a corresponding user input [[(54)]], to create a sequence of information items containing at least a preponderance of information items falling under said selected attribute.

54.   (Currently Amended) ~~Method~~ The method according to claim 53, wherein said ~~programme~~ program generating step ~~(48, 50)~~ is carried out ~~to create~~ by creating a sequence of information items and taking into account said selected attributes associated to said information items, and wherein said ~~programme~~ program generating step is further carried out ~~to take~~ by taking into account a discovery parameter entered through a user input [[(58)]] expressing a degree of accepted departure from said at least a preponderance of information items falling under said selected attribute, whereby said discovery parameter can be set to a first value in which said preponderance is maximal, possibly total, and to a second value, in which said sequence also contains a certain proportion [[P]] of information items not falling under said selected attribute.

55.   (Currently Amended) ~~Method~~ The method according to claim 54, wherein said ~~programme~~ program generating step ~~(48, 50)~~ is further carried out by taking into account said similarity ~~relation~~ relations between the stored segments in terms of their closeness in said sequence of stored segments, such that [[a]] said information ~~item not falling~~ items do not fall under [[a]] said selected attribute ~~(e.g. type of music) is~~ and are entered in said created sequence ~~if and where it has~~ when said information items have a predetermined degree of

closeness, as determined by said similarity relations, with an adjacent information item of said

sequence.

56.　(Currently Amended) ~~Method~~ The method according to claim 49, wherein said

~~programme~~ program generating step ~~(48, 50)~~ involves ~~labelling~~ labeling and storing said created

sequences as objects which can be selectively exported.

57.　(Currently Amended) ~~Method~~ The method according to claim [[33]] 56, further

comprising the step of importing said created sequences.

58.　(New) An apparatus for storing at least one sequence of information, said

information being formed from a succession of information items in which an artistic or rational

link is considered to exist between at least some pairs of adjacent items in said succession of

information items, said apparatus comprising:

　　input means for receiving said sequence of information items;

　　storage means for storing said information items; and

　　similarity analyzing means for automatically producing similarity relations between said

information items in terms of the relative closeness of the information items in said sequence as

received.

59.   (New) A method for storing at least one sequence of information, said information being formed from a succession of information items in which an artistic or rational link is considered to exist between at least some pairs of adjacent items in said succession of information items, said method comprising the steps of:

receiving said sequence of information items;

storing said information items; and

automatically producing similarity relations between said information items in terms of the relative closeness of the information items in said sequence as received.

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